

TWO NEW SPECIES OF *POMADASYS* (PISCES: HAEMULIDAE) FROM OMAN, WITH
A REDESCRIPTION OF *P. PUNCTULATUS* (RÜPPELL)

ROLAND J. MCKAY AND JOHN E. RANDALL

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Two new species of *Pomadasys* are described from Oman: *P. taeniatus*, distinctive in having seven dark brown stripes which do not bifurcate anteriorly, and *P. aheneus* with the dorsoanterior half or more of the body and postorbital head brassy yellow, fins grey with the soft portions of dorsal fin and caudal fin almost black. *Pomadasys punctulatus* (Rüppell, 1835), ranging from the Red Sea to Gulf of Oman is removed from synonymy and redescribed.

R.J. McKay, Queensland Museum, PO Box 3300, South Brisbane, Queensland 4101, Australia; J.E. Randall, Bishop Museum, PO Box 1900A, Honolulu, Hawai'i 96817-0916, United States of America; 10 March 1995.

Recent collections of fishes from Oman by the junior author and associates resulted in specimens of three species of *Pomadasys* that could not be identified from the existing review literature of the family Haemulidae from the western Indian Ocean, including McKay (1984) and Smith & McKay (1986). One of the species, represented by specimens from the Gulf of Oman and southern Oman, proved to be *Pomadasys punctulatus* (Rüppell) which Fowler (1931) placed in the synonymy of *P. furcatus* (Bloch & Schneider). We here resurrect this species from synonymy and provide a redescription. The other two species are described as new to make the names available for a book on Oman fishes in preparation by the junior author and a FAO Species Catalogue of the family Haemulidae currently being written by the senior author.

Lengths given for specimens are standard length (SL), measured from tip of snout to base of caudal fin (hypural plate flexure); body depth is maximum depth from base of dorsal spines; head length is taken from tip of snout to posterior margin of opercular membrane; snout length is taken between verticals from tip of snout (not including lip) to fleshy margin of orbit; eye diameter is greatest width between fleshy margins of orbit; interorbital space is least fleshy width; preorbital depth is least depth of preorbital from lower edge of orbit to above end of maxilla or before; caudal peduncle depth is least depth. The last divided ray of the dorsal and anal fins is counted as 1½; pectoral-ray counts include upper rudimentary ray; lateral-line scale counts are made to caudal flexure and do not include pored scales posterior to hypural plate; circumpeduncular scales are taken along one diagonal row from

above and below pored scale to pored scale on the other side, the upper count is given first, two pored scales and then lower count (total count is least number of scales around caudal peduncle); interradial scales are very small scales distal to basal sheath of scales into which base of dorsal and anal fins insert (magnification is sometimes required to locate these scales which are normally absent in this genus); gill-raker counts are made on first arch and include all rudiments that are at least as long as wide; upper count is given first; lower count includes raker at angle. Stripes are horizontal bands.

Data in parentheses in description refer to holotype.

Type specimens have been deposited in the Bernice P. Bishop Museum, Honolulu (BPBM); Naturhistorisches Museum Vienna (NMW); and Queensland Museum (QM).

Pomadasys aheneus sp.nov.
(Fig. 1A, B)

MATERIAL EXAMINED

HOLOTYPE: BPBM35931, 211mm SL, collected by handnet in 6m at Raysut Rock (16°56'1"N, 54°0'8"E), off Salalah Harbour, Oman, by J.L. Earle, 26 Oct 1993. PARATYPES: BPBM36055, three specimens 158, 165, 189mm SL, collected by spear in 8m at Raysut Rock by J.E. Randall, 08 Nov 1993. BPBM36166, 99 mm SL, collected by spear in 2m on rock and sand bottom on the east side of Masirah Island, Oman, by J.E. Randall, 20 Nov 1993. BPBM36161, 34mm SL, collected by handnet in 12m on the east side of Masirah Island, by J.L. Earle and J.E. Randall, 20 Nov 1993. QM29206, 183mm SL, collected by spear in 8m at base of breakwater at Raysut, by J.E. Randall, 08 Nov 1993.



Fig. 1. A, B, *Pomadasys aheneus* sp nov. A, holotype, BPBM35931, 211mm SL, Raysut, S. Oman. B, paratype, BPBM33166, 99mm SL, Masirah Is., Oman. C, *Pomadasys guoraca*, BPBM19033, 167mm SL, Sri Lanka. D, E, *Pomadasys taeniatus* sp nov. D, paratype, BPBM35841, 140mm SL, Hoon's Bay, S. Oman. E, aggregation, southern Oman. F, *Pomadasys furcatus*, BPBM27724, 136mm SL, southern India. G, H, *Pomadasys punctulatus*. G, BPBM35944, 175mm SL, Mahalla, Oman. H, underwater photograph, southern Oman.

DIAGNOSIS

A small species of *Pomadasys* with one or two rows of small interradial scales on the dorsal and anal fins; 11 to 12 dorsal spines and $14\frac{1}{2}$ dorsal rays; anal fin with $8\frac{1}{2}$ rays; circumpeduncular scales 26; colour in life brassy yellow on nape, anterior part of back, and upper sides; caudal fin and most of rayed dorsal fin blackish; juveniles yellow with two well-defined brown horizontal stripes and a thinner brown stripe in between.

DESCRIPTION

Dorsal fin elements XI-XII, $14\frac{1}{2}$; anal fin elements III, $8\frac{1}{2}$; pectoral rays 17 (17 rarely 16; gill-rakers 5-6+12-13 (5+13); lateral line scales 51-53(52); circumpeduncular scales $11+2+13=26$. Body oblong, compressed, its depth (90mm) 41 to 44% of SL (211mm); dorsal profile straight; least depth of caudal peduncle (25mm) 11.7 to 13% of SL. Head (70mm) 33 or 34% of SL; snout rounded, length (18mm) 25 to 27%; fleshy interorbital space (21mm) 29 to 31%; width of preorbital (12.8mm) 18 to 19.5%; eye (16.5mm) 24 to 28% of head length; mouth small, terminal, without fleshy lips, posterior edge of upper jaw reaching to anterior margin of eye; upper and lower jaws with band of small conical teeth in about 7 rows anteriorly, outer row enlarged; palate without teeth; deep pore above maxilla under preorbital; gill-rakers short (about 3mm long, about equal to arch at angle); four pores on chin, posterior two slit-like, within deep conspicuous pit; preoperculum serrate, coarsely so at angle. Dorsal fin with third and fourth spines (33mm) longest; second anal spine (38mm) longer and stronger than third, all spines striated; caudal fin slightly forked; soft portions of dorsal and anal fins with two or three proximal and one to two distal rows of interradial scales; basal sheath of scales present; $8\frac{1}{2}$ or $9\frac{1}{2}$ ($8\frac{1}{2}$) rows of scales in oblique line between origin of dorsal fin and lateral line.

Colour: In life, juveniles yellow with dark brown horizontal stripe originating on interorbital space and continuing posteriorly just below spinous dorsal fin and running just below rayed dorsal fin to upper origin of caudal fin, thin brown stripe from upper eye to middle of body along lateral line and distinct black-brown stripe from behind middle of eye to middle of caudal fin base where it terminates in black-brown confluent spot, fins yellow; at 99mm SL the coloration brassy yellow on nape, and anterior part of back and upper sides, with well-defined horizontal dark brown to blackish stripe behind eye to mid-

dle of caudal fin, four or five indistinct thin dark stripes above, and very indistinct thin dark stripe below from origin of pectoral fin to above posterior part of anal fin; distal half of dorsal fins blackish; caudal fin dusky; anal rays dusky; and pelvic fin rays olive; adults with anterior part of body and upper sides brassy to golden; outer tips of spinous dorsal fin dark brown to black, most of rayed dorsal and caudal fin black; anal and pelvic fins dusky, second anal spine darker. In alcohol, the brassy coloration is pale brown. Swimbladder simple without anteriolateral horn-like extensions.

ETYMOLOGY

From the latin *aeneus* or *aheneus* meaning bronze or brassy in reference to the characteristic brassy yellow anterodorsal coloration of this species in life.

REMARKS

Very similar to *Pomadasys guoraca* (Cuvier, 1830) from India and Sri Lanka, (see Fig. 1C) but with $8\frac{1}{2}$ anal rays, 26 circumpeduncular scales (11 above, 2 pored and 13 below) and coloration brassy on anterior back, upper sides and nape, caudal fin and soft dorsal fin blackish. *P. guoraca* (Plate 1D) has $7\frac{1}{2}$ anal rays, 22 circumpeduncular scales (9+2+11), and is silvery with yellow horizontal stripes following scale rows below lateral line, of which four or five are distinct; caudal fin dusky to black with a posterior white margin; soft dorsal fin pale with dark base; anal and paired fins bright yellow.

Pomadasys taeniatus sp. nov.

(Fig. 1D, E)

Pomadasys furcatus (non Bloch & Schneider): Steindachner, 1907:130 (Gischin, South Arabia = Qischin, Yemen).

MATERIAL EXAMINED

HOLOTYPE: BPBM35841, 140mm SL, collected by spear in 3m at Hoon's Bay (16°58'0"N, 54°42'50"E), Oman, by J.E. Randall, 23 April 1990. Colour photograph of holotype.

PARATYPES: National Museum Vienna NMW38942: 1-2, two specimens, 128mm, 141mm SL, collected at Gischin by Hein, 14 Apr 1902; specimens reported as *P. furcatus* by Steindachner, 1907).

DIAGNOSIS

A small species of *Pomadasys* with one or two rows of small interradial scales on dorsal and anal fins; 12 dorsal spines and $15\frac{1}{2}$ dorsal rays; anal

fin with $8\frac{1}{2}$ rays; circumpeduncular scales 26; colour in life silvery with seven undivided dark bronze stripes.

DESCRIPTION

Dorsal fin elements XII, $15\frac{1}{2}$; anal fin elements III, $8\frac{1}{2}$; pectoral rays 17, rarely 16 (17); gillrakers 5-6+12 (6+12); lateral line scales 52-53 (52); circumpeduncular scales $11+2+13=26$. Body oblong, compressed, its depth (60mm) 42 to 43% of SL (140mm); dorsal profile straight; least depth of caudal peduncle (16.8mm) 11.7 to 12.3% of SL. Head (46.3mm) 32 to 33% of SL; snout rounded, length (12mm) 26 to 27%; fleshy interorbital space (14mm) 30 to 31%; width of preorbital (9mm) 19 to 21%; eye (11.8mm) 24 to 26% of head length; mouth small, terminal, without fleshy lips, posterior edge of upper jaw reaching to anterior margin of eye; upper and lower jaws with band of small conical teeth in about 7 rows anteriorly, outer row enlarged; palate without teeth; shallow pore above maxilla under preorbital; gillrakers short (about 2.5mm long, about equal to arch at angle); preoperculum serrate, coarsely so at angle. Dorsal fin with third and fourth dorsal spines (24mm) longest; second anal spine (23mm) longer and stronger than third, all spines striated anteriorly; soft portions of dorsal and anal fins with one or two proximal and one distal row of interradiial scales; basal sheath of scales present; $7\frac{1}{2}$ or $8\frac{1}{2}$ ($8\frac{1}{2}$) rows of scales in oblique line between origin of dorsal fin and lateral line.

Colour: in life, body silvery with seven dark bronze stripes which converge without bifurcating onto head; a blackish spot posteriorly on opercle superimposed on fifth bronze stripe and extending a little above; fins purplish-grey except basal three-fourths of spinous part of dorsal fin which is whitish and scaly sheath at base of anal fin which is silvery. In alcohol, body pale brown with seven distinct undivided dark brown stripes each about one to one-and-a-quarter scales in width separated by about one and one-half scales; uppermost curved stripe originates on nape and runs along base of spinous dorsal fin, extending onto base of interspinous membranes and along base of rayed dorsal fin; second curves up from nape and terminates at middle of rayed dorsal fin base; third from above eye and lateral line to run along posterior third of rayed dorsal fin; fourth is almost straight from above eye onto origin of lateral line, thence below to just before level of posterior dorsal spines where it crosses lateral line again to continue just below dorsal surface of

caudal peduncle; fifth from behind middle of eye through dark brown blotch on upper part of opercle to middle of caudal peduncle; sixth from below eye to upper pectoral base and along side to lower part of caudal peduncle; seventh from below pectoral fin base to fade above end of anal fin base; thin poorly defined eighth stripe from bottom of opercle, between pelvic and pectoral base to above rayed anal fin where it broadens to cover most of scaly sheath of anal fin; dorsal fin with interspinous membranes indistinctly blotched between third to seventh spines; other fins slightly dusky. Swimbladder simple without anteriolateral horn-like extensions.

ETYMOLOGY

From the Latin *taenia* meaning ribbon or band.

REMARKS

Very similar to *Pomadasyf furcatus* (Bloch & Schneider, 1801), (see Fig. 1F) but with seven or eight undivided dark brown longitudinal stripes. The juvenile of the former species may have the stripes undivided, but by 100mm SL second, third and fourth stripes are bifurcate at least anteriorly; adults have second, third and fourth stripes bifurcate to about fifth dorsal spine and fifth stripe bifurcate on opercle; sixth stripe usually undivided. Specimens of 225mm SL have upper stripes divided to about the vertical from sixth dorsal spine.

The new species has the dark stripes well defined, without trace of anterior division. The interradiial membranes of the soft dorsal fin have one or two rows of scales as does *P. furcatus*. Recent illustrations of *P. furcatus* are given by Gloerfelt-Tarp & Kailola (1984:198), McKay (1984), Smith & McKay, (1986: 179.11).

Related to *Pomadasyf andamanensis* with four distinct undivided black-brown stripes recently found in the Andaman Sea (McKay & Satapoomin, 1994).

Pomadasyf punctulatus (Rüppell, 1838)

(Fig. 1G, H)

Pristipoma punctulatum Rüppell, 1838: 124, pl. 30 fig. 3 (type locality Massaua, Red Sea).

MATERIAL EXAMINED

BPBM21425 (2), 204mm, 205mm SL, Gulf of Oman, fish market at Port Qaboos, Matrah, Oman. BPBM35944, 176mm SL, Mahallah, southern Oman. NMW38943 (2), 76mm, 94mm SL, Gischin, 1902, collected Hein (reported by Steindachner, 1907).

DESCRIPTION

Dorsal fin elements XII, 15½; anal fin elements III, 8½; pectoral rays 16; gillrakers 5-6+12-13; lateral-line scales 50-52; circumpeduncular scales 9-10+2+11-13=22-25. Body oblong, compressed, its depth 40 to 44% of SL. Head 31 to 33% of SL; snout 23 to 27%; eye 24 to 25% of head length (decreases with growth); mouth small, terminal, without fleshy lips, posterior edge of upper jaw reaching to anterior margin of eye; deep pore above maxilla under preorbital well developed in juveniles, moderate in large adults; preoperculum finely serrate; second anal spine longer and stronger than third, all spines longitudinally striated; soft portions of dorsal and anal fins with row of interradial scales; basal sheath of scales present; pectoral fins 35 to 37% of standard length, reaches to or just beyond anus; 8 to 10 rows of scales in oblique line between origin of dorsal fin and lateral line, 7½ scales above lateral line at middle of spinous dorsal fin.

Colour: In life, silvery, the back with faint yellow-green iridescence, with irregular narrow brown stripes on upper two-thirds of body; fins dusky, caudal fin darkest; faint dark spots in a row at base of dorsal fin; large diffuse blackish blotch on membranes anteriorly in middle of pelvic fins; mouth with palate and part of sides of mouth dull orange-red. In alcohol, body pale brownish, lighter below, back with 11 or 12 longitudinal brown lines on alternate scale rows, the upper ones broken into groups of small contiguous spots; dorsal fin with darker basal blotches on interspinous membranes and about two rows of spots on interradial membranes; juveniles with wavy longitudinal brown lines formed largely of contiguous spots; anal and pelvic fins pale yellowish; no dark spot on operculum. Swimbladder without anteriolateral horn-like extensions.

REMARKS

This species was placed in the synonymy of *P. furcatus* by Fowler (1931). It has a very distinctive colour pattern quite unlike the former species and generally has fewer lateral-line scales (50-52 v 52-54) and upper peduncular scales (9-10 v 11). Rüppell's figure is very accurate, but may have led Fowler to consider *P. punctulatus* as the adult of *P. furcatus* as the number of stripes increase with growth. However, we have examined small specimens of both species and the juvenile *P.*

punctulatus has the same pattern of thin stripes as the adult.

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